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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,120

07/21/2003

Chi-Yin Lee

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6118

7590 07/27/2007
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

CHENG, JACQUELINE

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/624,120

Applicant(s)

LEE ET AL.

Examiner

Jacqueline Cheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 19-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 19-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/21/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I in the reply filed on April 30, 2007 is acknowledged. The examiner mistakenly grouped claim 24 with group I, when it should be grouped with group II being dependent upon an independent claim in group II. Therefore the examiner has withdrawn claims 13-18 and 24 which are tied to unelected group II.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-3, 6-8, 21** rejected under 35 U.S.C. 102(b) as being anticipated by Pan (US 6,322,509 B1). Pan discloses a method and apparatus for automatically initializing and adjusting the Doppler gate position and size settings (abstract). A sample gate cursor is fired while being moved by the system operator (fired at least a first and second sequence as to get information while the cursor is being moved it must be fired at least at the start and at the end of being moved) (col. 7 line 19-26). The Doppler parameter such as the gate position and angle value is automatically set as a function of the change of the Doppler parameter as a function of the best

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vessel segment. The goal values for the best vessel segment can be chosen on any reasonable characteristic depending upon the desired parameters for the image such as vessel diameter, or most uniform diameter (col. 7 line 55-col. 8 line 23).

4. **Claims 1, 2, 4, 5, 11, 19, 20** are rejected under 35 U.S.C. 102(b) as being anticipated by Mo'077 (US 6,251,077 B1). Mo'077 discloses a method and apparatus for suppressing background noise in spectral Doppler imaging using adaptive noise-reduction filters. Mo'077 discloses that in spectral Doppler systems, if the Doppler signal is weak, a system to automatically set the Doppler gain can be utilized in order to visualize and hear the flow signals clearly. This increase of Doppler gains can boost background system noise, so Mo'077 uses adaptive (automatically changing) noise-reduction filters (col. 3 line 22-40).

5. **Claims 1, 9, 10, 21-23, 25** are rejected under 35 U.S.C. 102(e) as being anticipated by Mo'967 (US 6,577,967 B2). Mo'967 discloses an ultrasound system comprising a Doppler image display unit for displaying a Doppler image with adjustable Doppler parameters (of polarity and position along the frequency axis). In Mo'967 A plurality of sequences of Doppler pulses (the results of are the various memory signals) are fired and depending on the analyzed values the polarity, position, or pulse repetition frequency can be automatically adjusted, therefore each of the future pulses fired (a first, second, and third sequence) has a more optimized setting.

6. **Claims 1-12 and 19-21** rejected under 35 U.S.C. 102(e) as being anticipated by Bakircioglu (US 6,733,454 B1). Bakircioglu discloses a method and system for automatic optimization of spectral Doppler ultrasound imaging. Imaging parameters such as gate position, Doppler gain and filter settings are automatically set after firing sets of sequences of spectral Doppler pulses over a heart period with predetermined imaging parameters (abstract, col. 3 line 5-31, col. 5 line 4-15, col. 7 line 7-13).

7. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,176,830 B1 to Freiburger. US 5,476,097 to Robinson. US 5,299,174 to Forestieri.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Cheng whose telephone number is 571-272-5596. The examiner can normally be reached on M-F 10:00-6:30.

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10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC


ELENI MANTIS MERCADER
SUPERVISORY PATENT EXAMINER